

**REMARKS**

Claims 1, 2, 5-11, 13-21, 23, 26-28 and 30-36 are pending in this application; claims 14, 15, 31 and 32 have been withdrawn from consideration. By this Amendment, claims 1, 5, 6, 9, 10, 16, 17, 27 and 33-36 are amended. Support for the amendments to the claims may be found in the Examples set forth in the specification at, for example, page 43, lines 10-19, page 52, lines 8-9, page 52, line 26 to page 53, line 1, of the specification. No new matter is added. In view of at least the foregoing amendments and the following remarks, reconsideration and allowance are respectfully requested.

**I. Rejection Under 35 U.S.C. §102**

The Office Action rejects claims 1, 2, 5-11, 13, 16-21, 23, 26-28, 20<sup>1</sup> and 33-36 under 35 U.S.C. §102(b) as allegedly being anticipated by Enomota et al. (KR Publication No. 2003/078731, hereinafter "Enomota"), relying on Naito et al. (U.S. Patent Application Publication No. 2004/0018386, hereinafter "Naito") as an English translation of Enomota. Applicants respectfully traverse the rejection.

Claims 1 and 16 recite, *inter alia*, "the poly (3,4-ethylenedioxythiophene/styrenesulfonic acid) is characterized in that when the hole transport material is dissolved or dispersed in a liquid so that its concentration becomes 2.0 wt%, the liquid ... is diluted with ultrapure water and then the diluted liquid is concentrated with an ultrafiltration membrane having a cut-off molecular weight of 3,000 to 5,000 until its concentration becomes 2.0 wt%, the concentrated liquid contains nonionic impurities having a molecular weight of 5,000 or less, but amounts of the nonionic impurities contained therein is 40 ppm or less." Naito does not disclose, either expressly or inherently, these features.

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<sup>1</sup> In view of the Office Action summary, Applicants assume that the Office Action intends to reject claims 1, 2, 5-11, 13, 16-21, 23, 26-28, 30 and 33-36 under 35 U.S.C. §102 (b). Applicants' response is based on this assumption.

Naito merely discloses a permeable membrane having a fractionating molecular weight ranging from 8,000 to 25,000. See Naito, paragraph [0073].

Naito's permeable membrane having the fractionating molecular weight of 8,000 to 25,000 is much larger than the cut-off molecular weight of 3,000 to 5,000 of the present claims. Furthermore, in Naito, small solid matters such as the nonionic impurities are completely removed. Specifically, Naito discloses that "[s]mall solid matters passing through a permeable membrane having a fractionating molecular weight of 8,000 to 25,000 may become one of the causes for generating flocculation. Namely, since these small solid matters are poor in stability, they are liable to flocculate together. ... By removing small solid matters and inorganic ionic components by dialysis, it is possible to obtain an ink which can be hardly flocculated." See Naito, paragraphs [0073] and [0074].

Naito also discloses that "this flocculation was confirmed to badly affect the surface flatness of film when the ink was formed into a thin film, thereby badly affecting the properties of the display device." See Naito, paragraph [0085]. Thus, Naito requires to completely eliminate the small molecules such as the nonionic impurities, and for this purpose, Naito uses the permeable membrane having much larger fractionating molecular weight of 8,000 to 25,000. As a result, Naito discloses removing molecules with a molecular weight from 5,000 to 8,000 which would not be removed by an ultra-filtration having a cutoff molecular weight of 3,000 to 5,000, as recited in claim 1, and thus Naito fails to disclose the cut-off molecular weight of the present claims.

The concentrated liquid of the present claims may contain nonionic impurities having a molecular weight of 5,000 or less in an amount of 40 ppm or less, and thus does not require complete removal of such impurities. Even with the presence of such nonionic impurities, the decrease of light-emission luminance is suppressed and excellent light emitting properties are maintained for a long period of time. See specification, page 51, lines 10-16.

For at least these reasons, Naito does not disclose, either expressly or inherently, the features of claims 1 and 16. Because Naito does not disclose, either expressly or inherently, each and every feature of independent claims 1 and 16, Naito does not anticipate claims 1 and 16 and the claims dependent therefrom.

Claims 9, 10, 13, 27 and 30 also contain the features that "the layer is formed by preparing a liquid in which poly (3,4-ethylenedioxythiophene/styrenesulfonic acid) is dispersed so that its concentration becomes 2.0 wt%, diluting the liquid with ultrapure water, concentration the diluted liquid with an ultrafiltration membrane has a cut-off molecular weight of 3,000 to 5,000 until its concentration becomes 2.0 wt%," and for similar reasons as discussed for claims 1 and 16, Naito does not anticipate claims 9, 10, 13, 27 and 30 and the claims dependent therefrom.

Reconsideration and withdrawal of the rejection are respectfully requested.

## **II. Request for Rejoinder**

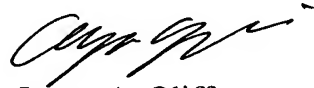
Applicants also respectfully request rejoinder of non-elected method claims 14, 15, 31 and 32. Where product and process claims are presented in the same application, Applicants may be called upon under 35 U.S.C. §121 to elect claims to either the product or process. MPEP § 821.04. However, in the case of an elected product claim, rejoinder will be permitted when a product claim is found allowable and the withdrawn process claim depends from or otherwise includes all the limitations of an allowed product claim. *Id.* Because process claims 14, 15, 31 and 32 include all the limitations of product claims 1 and 16, process claims 14, 15, 31 and 32 must be rejoined with the product claims when the product claims are found allowable.

**III. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Date: March 12, 2010

Attachment:  
Request for Continued Examination

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